

CLAIMS:

- 1 1. A device (10) for transdermally delivering fentanyl by
2 electrotransport, the device including a donor reservoir (26) containing the
3 fentanyl in a form to be delivered by electrotransport, a counter reservoir (28),
4 a source of electrical power (32) electrically connected to the reservoirs
5 (26,28) and a control circuit (19,40) for controlling magnitude and timing of
6 applied electrotransport current, the device (10) characterized by:
7 the reservoirs (26,28), the power source (32) and the control circuit
8 (19,40) being effective to deliver by electrotransport about 20 µg to about
9 60 µg of fentanyl over a delivery period of up to about 20 minutes.
- 10 2. The device of claim 1, wherein the device (10) delivers about
11 35 µg to about 45 µg of fentanyl over a delivery period of about 5 to 15
12 minutes.
- 13 3. The device of claim 1, wherein the device (10) delivers about
14 40 µg of fentanyl over the delivery period.
- 15 4. The device of claim 1, wherein the device (10) is used to treat
16 less severe pain and the device (10) delivers about 20 µg to about 30 µg of
17 fentanyl over the delivery period.
- 18 5. The device of claim 1, wherein the delivery period is about
19 10 minutes.
- 20 6. The device of claim 1, the device being effective to deliver up to
21 about 100 additional 20 µg to 60 µg doses of fentanyl by electrotransport over
22 one or more subsequent delivery periods, each delivery period being of up to
23 about 20 minutes duration.
- 24 7. The device of claim 1, wherein the donor reservoir (26)
25 comprises a fentanyl salt formulation.
- 26 8. The device of claim 7, wherein the fentanyl salt comprises about
27 1.9 to 2.0 wt% of the formulation.

1 9.— The device of claim 8, wherein the fentanyl salt is fentanyl
2 hydrochloride.

3 10. The device of claim 1, wherein the donor reservoir (26)
4 comprises polyvinyl alcohol.

5 11. A device (10) for transdermally delivering sufentanil by
6 electrotransport, the device including a donor reservoir (26) containing the
7 sufentanil in a form to be delivered by electrotransport, a counter reservoir
8 (28), a source of electrical power (32) electrically connected to the reservoirs
9 (26,28) and a control circuit (19,40) for controlling magnitude and timing of
10 applied electrotransport current, the device (10) characterized by:

11 the reservoirs (26,28), the power source (32) and the control circuit
12 (19,40) being effective to deliver by electrotransport about 2.3 µg to about
13 7.0 µg of sufentanil over a delivery period of up to about 20 minutes.

14 12. The device of claim 11, wherein the device (10) delivers
15 about 4 µg to about 5.5 µg of sufentanil over a delivery period of about
16 5 to 15 minutes.

17 13. The device of claim 11, wherein the device (10) delivers about
18 4.7 µg of sufentanil over the delivery period.

19 14. The device of claim 11, wherein the device (10) is used to treat
20 less severe pain and the device (10) delivers about 2.3 µg to about 3.5 µg of
21 sufentanil over the delivery period.

22 15. The device of claim 11, wherein the delivery period is about
23 10 minutes.

24 16. The device of claim 11, the device being effective to deliver up
25 to about 100 additional 2.3 µg to 7.0 µg doses of sufentanil by
26 electrotransport over one or more subsequent delivery periods, each delivery
27 period being of up to about 20 minutes duration.

28 17. The device of claim 11, wherein the donor reservoir (26)
29 comprises a sufentanil salt formulation.

1 18. The device of claim 11, wherein the sufentanil salt comprises
2 about 1.9 to 2.0 wt% of the formulation.

3 19. The device of claim 18, wherein the sufentanil salt is sufentanil
4 hydrochloride.

5 20. The device of claim 11, wherein the donor reservoir (26)
6 comprises polyvinyl alcohol.